

In the claims:

1. (currently amended) A method of forming an array of focusing elements for use in a lithography system, said method comprising the steps of:

providing a substrate;

conducting maskless lithography on said substrate at a first location using a first lithographic technique and a first set of exposure characteristics to form a first resist area;

depositing a conductive absorber material on the substrate;

applying an electrical potential to at least a first portion of the conductive absorber material such that a second disconnected portion of the conductive material has a different electrical potential; and

etching said second portion of said conductive material to provide a first pattern on said substrate

~~conducting maskless lithography on said substrate at a second location using the first lithographic technique and a second set of exposure characteristics to form a second resist area, said second resist area having thickness that is different than a thickness of said first resist area.~~

2. (previously presented) The method as claimed in claim 1, wherein said substrate is formed of hydrogen silsesquioxane.

3. (previously presented) The method as claimed in claim 1, wherein said first lithographic technique involves the use of electron beam lithography.

4. (previously presented) The method as claimed in claim 1, wherein said first lithographic technique involves the use of x-ray lithography.

5. (currently amended) The method as claimed in claim 1, wherein said first resist area ~~and said second resist area include~~ includes SiO₂.
6. (currently amended) The method as claimed in claim 1, wherein said first resist area ~~and said second resist area are~~ is transparent.
7. (currently amended) The method as claimed in claim 1, wherein said first resist area ~~and said second resist area form~~ forms at least part of a Fresnel zone plate.
8. (currently amended) The method as claimed in claim 1, wherein said first resist area ~~and said second resist area form~~ forms at least part of a blazed zone plate.
9. (currently amended) The method as claimed in claim 1, wherein first resist area ~~and said second resist area form~~ forms at least part of an apodized zone plate.
10. (currently amended) A method of forming an array of focusing elements for use in a maskless lithography system, said method comprising the steps of:
providing a substrate including hydrogen silsesquioxane, ~~and~~
providing a first pattern via maskless lithography in said substrate, said first pattern including focusing elements for said maskless lithography system,
depositing a conductive absorber material on said substrate,
applying an electrical potential to at least a first portion of said conductive absorber material leaving a second portion of said conductive material with a different electrical potential, and
etching said second portion of said conductive material to provide a first pattern on said substrate that is aligned with said first portion of said conductive absorber.

11. (original) The method as claimed in claim 10, wherein said step of providing a first pattern via lithography in said substrate involves the use of at least one of electron beam lithography or x-ray lithography.
12. (original) The method as claimed in claim 10, wherein said first pattern provides at least one blazed focusing element.
13. (original) A method of forming an array of focusing elements for use in a lithography system, said method comprising the steps of:
- providing a first pattern via lithography in a substrate;
 - depositing a conductive absorber material on said substrate;
 - applying an electrical potential to at least a first portion of said conductive absorber material, leaving a second portion of said conductive material with a different electrical potential;
 - and
 - etching said second portion of said conductive material to provide a first pattern on said substrate that is aligned with said first portion of said conductive absorber material.
14. (original) The method as claimed in claim 13, wherein said substrate is formed of hydrogen silsesquioxane.
15. (original) The method as claimed in claim 13, wherein said step of providing a first pattern via at least one of electron beam lithography or x-ray lithography.
16. (original) The method as claimed in claim 13, wherein said conductive absorber material is chromium.
17. (original) The method as claimed in claim 13, wherein said first pattern includes an array of

optical elements.

18. (original) The method as claimed in claim 13, wherein said first pattern includes an array of blazed zone plates.

19. (original) A method of forming an array of focusing elements for use in a lithography system, said method comprising the steps of:

providing a first pattern via lithography in a substrate including hydrogen silsesquioxane;

depositing a conductive absorber material on said substrate;

applying an electrical potential to at least a first electrically continuous portion of said conductive absorber material, leaving a second electrically discontinuous portion of said conductive material with a different electrical potential; and

wet etching said second portion of said conductive material to provide a first pattern on said substrate that is aligned with said first portion of said conductive absorber material, said first pattern including an array of focusing elements for the lithography system.

20. (original) The method as claimed in claim 19, wherein said step of providing said first pattern on said substrate involves electron beam lithography.